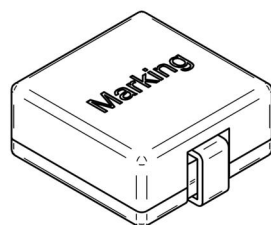
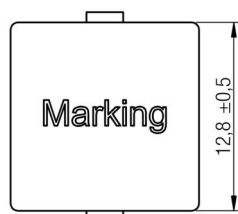
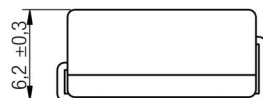
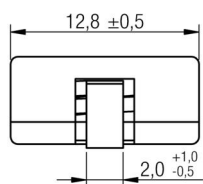
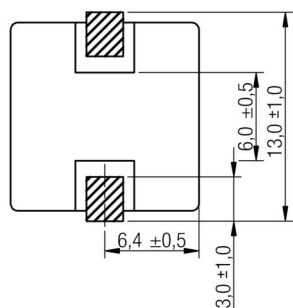
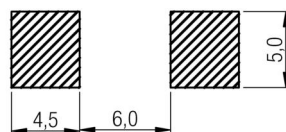


A Dimensions: [mm]

Scale - 2:1

Reference on drawing	Description
Marking	X YMDD X
Internal Marking	X (may be changed)
Date code	YMDD

B Recommended land pattern: [mm]

Scale - 2:1

C Schematic:**D Electrical Properties:**

Properties	Test conditions		Value	Unit	Tol.
Inductance	100 kHz/ 10 mA	L	18	μH	± 20%
Rated inductance	100 kHz/ 10 mA/ 7.5 A	L _R	13	μH	typ.
Rated current	ΔT = 50 K	I _R	7.5	A	max.
Saturation current	ΔL/L < 30%	I _{sat}	7.5	A	typ.
DC Resistance	@ 20°C	R _{DC}	22.0	mΩ	±10%
Self resonant frequency		f _{res}	16	MHz	typ.

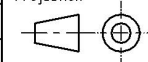
E General information:

It is recommended that the temperature of the part does not exceed 155°C under worst case operating conditions.

- Ambient temperature: -40°C to +105°C (referring to I_R)
- Operating temperature: -40°C to +155°C
- Storage temperature (on tape & reel): -20°C to +40°C; 75% RH max.
- Test conditions of Electrical Properties: 20°C, 33% RH if not specified differently

				Projection		DESCRIPTION
2.5	2014-09-16	SSt	BD			WE-HCI SMD Flat Wire High Current Inductor
2.4	2013-12-11	SSt	SSt			
2.3	2013-04-29	SSt	SSt			Order.- No. 7443551181
2.2	2012-12-06	SSt	SSt			
2.1	2012-10-25	SSt	BD			Size: 1365
2.0	2012-09-03	SSt	BD			
1.0	2010-07-22	BD				 COMPLIANT RoHS&REACH WÜRTH ELEKTRONIK
REV	DATE	BY	CHECKED			

Projection



Würth Elektronik eiSos GmbH & Co. KG
EMC & Inductive Solutions
Max-Eyth-Str. 1
74638 Waldenburg
Germany
Tel. +49 (0) 79 42 945 - 0
www.we-online.com
eiSos@we-online.com

DESCRIPTION

WE-HCI SMD Flat Wire High Current Inductor

Order.- No.

7443551181

Size: 1365

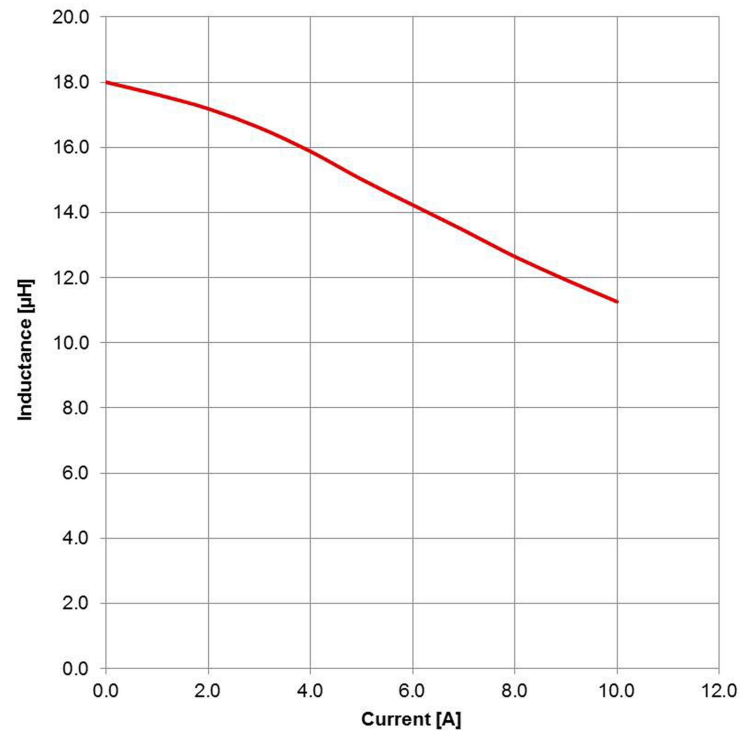


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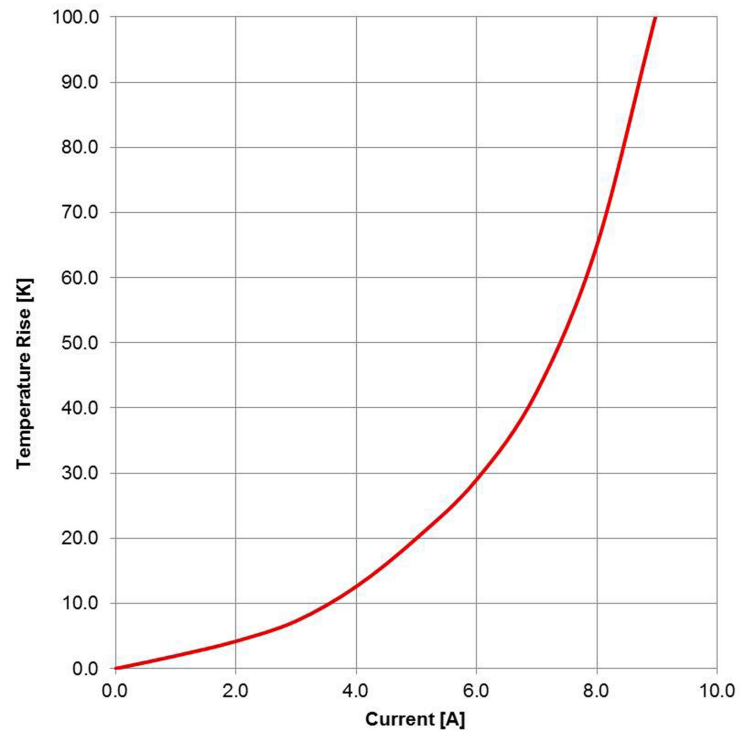
A4

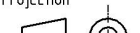


F1 Typical Inductance vs. Current Characteristics:



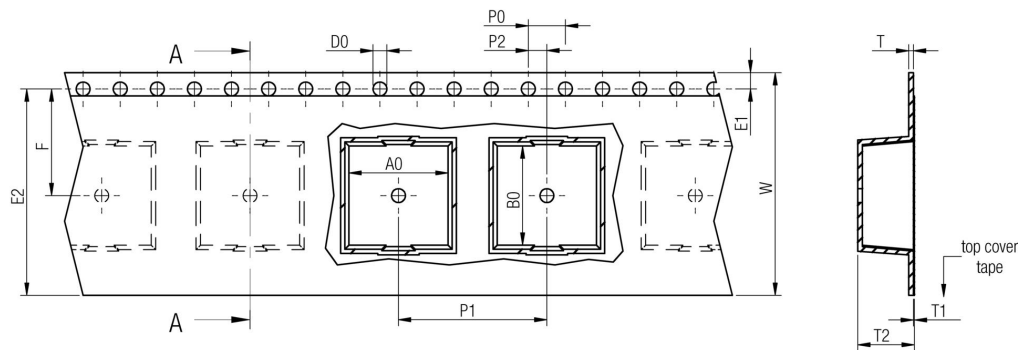
F2 Typical Temperature Rise vs. Current Characteristics:



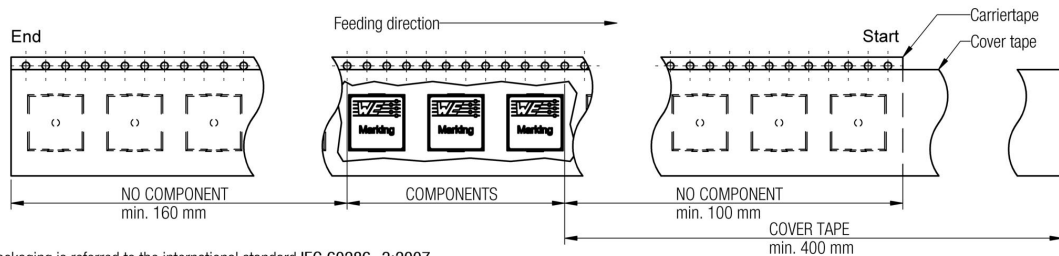
				Projection 		DESCRIPTION	
2.5	2014-09-16	SSt	BD				
2.4	2013-12-11	SSt	SSt	Würth Elektronik eiSos GmbH & Co. KG EMC & Inductive Solutions Max-Eyth-Str. 1 74638 Waldenburg Germany Tel. +49 (0) 79 42 945 - 0 www.we-online.com eiSos@we-online.com	WE-HCI SMD Flat Wire High Current Inductor		
2.3	2013-04-29	SSt	SSt		Order.- No. 7443551181  COMPLIANT RoHS&REACH WÜRTH ELEKTRONIK	SIZE	
2.2	2012-12-06	SSt	SSt			A4	
2.1	2012-10-25	SSt	BD				
2.0	2012-09-03	SSt	BD				
1.0	2010-07-22	BD					
REV	DATE	BY	CHECKED		Size: 1365		

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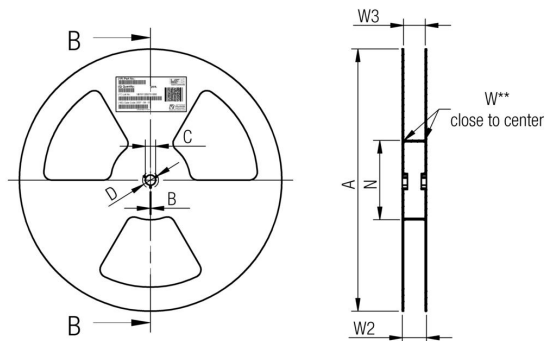
G Packaging Specification - Tape and Reel [mm]:



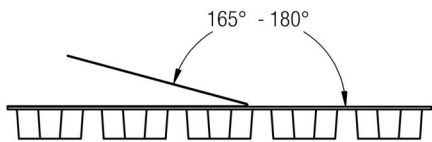
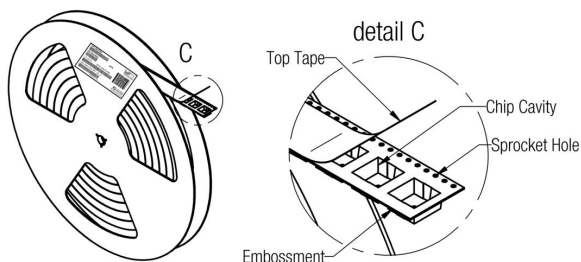
	A0	B0	W	P1	T	T1	T2	D0	E1	E2	F	P0	P2	Tape	VPE / packaging unit
tolerance	typ.	typ.	+0,3 -0,1	± 0,1	± 0,1	max.	typ.	+0,3 -0,1	± 0,1	min.	± 0,05	± 0,1	± 0,05		
size	7030	7,05	7,20	16,00	12,00	0,35	0,10	3,45	1,50	1,75	14,25	7,50	4,00	2,00	Polystyrene 1500
	7034	7,20	7,80	16,00	12,00	0,35	0,10	4,10	1,50	1,75	14,25	7,50	4,00	2,00	Polystyrene 1500
	7040	7,30	7,55	16,00	12,00	0,35	0,10	5,00	1,50	1,75	14,25	7,50	4,00	2,00	Polystyrene 1000
	7050	7,30	7,55	16,00	12,00	0,35	0,10	5,60	1,50	1,75	14,25	7,50	4,00	2,00	Polystyrene 1000
	1030	10,80	11,10	24,00	16,00	0,35	0,10	3,80	1,50	1,75	22,25	11,50	4,00	2,00	Polystyrene 800
	1040	10,80	11,30	24,00	16,00	0,35	0,10	5,00	1,50	1,75	22,25	11,50	4,00	2,00	Polystyrene 800
	1050	10,80	11,30	24,00	16,00	0,35	0,10	5,80	1,50	1,75	22,25	11,50	4,00	2,00	Polystyrene 700
	1335	13,70	13,70	24,00	16,00	0,35	0,10	4,40	1,50	1,75	22,25	11,50	4,00	2,00	Polystyrene 400
	1350	14,00	14,00	24,00	16,00	0,35	0,10	6,50	1,50	1,75	22,25	11,50	4,00	2,00	Polystyrene 400
	1365	13,60	13,70	24,00	16,00	0,35	0,10	7,20	1,50	1,75	22,25	11,50	4,00	2,00	Polystyrene 400



Packaging is referred to the international standard IEC 60286 -3:2007



	A	B	C	D	N	W1	W2	W3
tolerance	± 2,0	min.	± 0,8	min.	min.	+ 1,5	max.	min. max.
Tape width	16 mm	330,00	1,50	13,00	20,20	100,00	16,40	22,40
	24 mm	330,00	1,50	13,00	20,20	100,00	24,40	30,40



	Pull-of force
Tape width 16 mm	0,1 N - 1,3 N
Tape width 24 mm	0,1 N - 1,3 N

				Projection
2.5	2014-09-16	SSt	BD	
2.4	2013-12-11	SSt	SSt	
2.3	2013-04-29	SSt	SSt	
2.2	2012-12-06	SSt	SSt	
2.1	2012-10-25	SSt	BD	
2.0	2012-09-03	SSt	BD	
1.0	2010-07-22	BD		
REV	DATE	BY	CHECKED	

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www.we-online.com
eiSos@we-online.com

DESCRIPTION

WE-HCI SMD Flat Wire High Current Inductor

Order.- No.

7443551181

Size: 1365



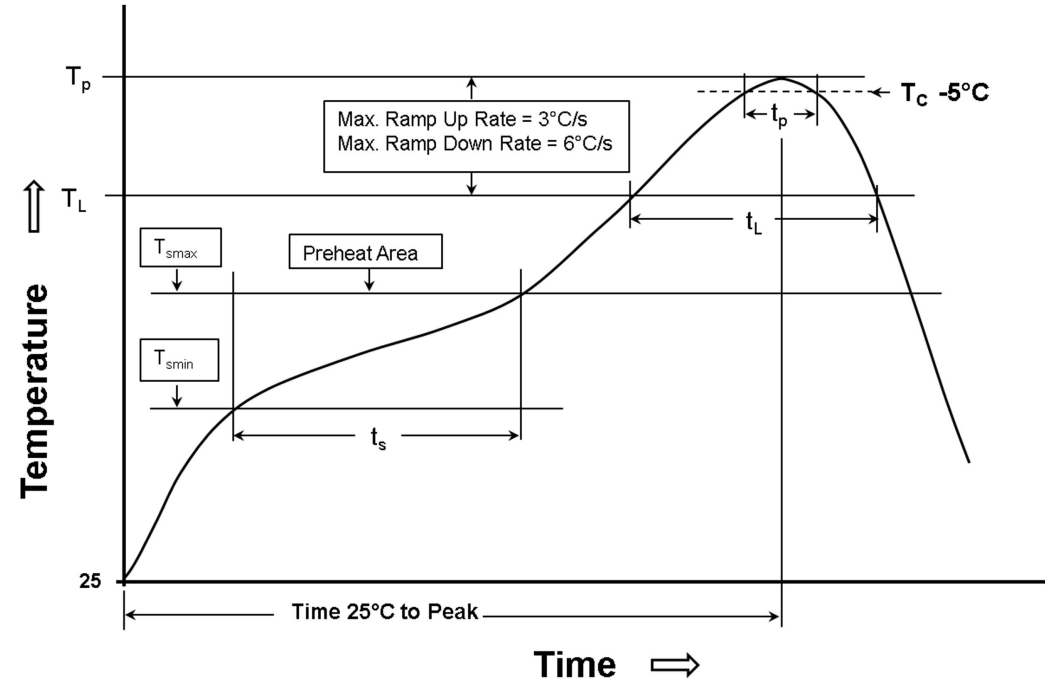
SIZE

A4

H Soldering Specifications:



H1: Classification Reflow Profile for SMT components:



H2: Classification Reflow Profiles

Profile Feature	Pb-Free Assembly
Preheat - Temperature Min (T_{smin}) - Temperature Max (T_{smax}) - Time (t_s) from (T_{smin} to T_{smax})	150°C 200°C 60-120 seconds
Ramp-up rate (T_L to T_P)	3°C/ second max.
Liquidous temperature (T_L) Time (t_L) maintained above T_L	217°C 60-150 seconds
Peak package body temperature (T_P)	See Table H3
Time within 5°C of actual peak temperature (t_p)	20-30 seconds
Ramp-down rate (T_P to T_L)	6°C/ second max.
Time 25°C to peak temperature	8 minutes max.

refer to IPC/JEDEC J-STD-020D

H3: Package Classification Reflow Temperature

	Package Thickness	Volume mm³ <350	Volume mm³ 350 - 2000	Volume mm³ >2000
PB-Free Assembly	< 1.6 mm	260°C	260°C	260°C
PB-Free Assembly	1.6 - 2.5 mm	260°C	250°C	245°C
PB-Free Assembly	≥ 2.5 mm	250°C	245°C	245°C

refer to IPC/JEDEC J-STD-020D

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I Cautions and Warnings:

The following conditions apply to all goods within the product series of WE-HCI of Würth Elektronik eiSos GmbH & Co. KG:

General:

All recommendations according to the general technical specifications of the data sheet have to be complied with.

The usage and operation of the product within ambient conditions which probably alloy or harm the wire isolation has to be avoided.

If the product is potted in customer applications, the potting material might shrink during and after hardening. The product is exposed to the pressure of the potting material with the effect that the core, wire and termination is possibly damaged by this pressure and so the electrical as well as the mechanical characteristics are endangered to be affected. After the potting material is cured, the core, wire and termination of the product have to be checked if any reduced electrical or mechanical functions or destructions have occurred.

The responsibility for the applicability of customer specific products and use in a particular customer design is always within the authority of the customer. All technical specifications for standard products do also apply to customer specific products.

Cleaning agents that are used to clean the customer application might damage or change the characteristics of the component, body, pins or termination.

Direct mechanical impact to the product shall be prevented as the core material could flake or in the worst case it could break.

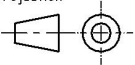
Product specific:

Follow all instructions mentioned in the data sheet, especially:

- The soldering profile has to be complied with according to the technical reflow soldering specification, otherwise this will void the warranty.
- All products shall be used before the end of the period of 12 months based on the product date code, if not a 100% solderability can't be ensured.
- Violation of the technical product specifications such as exceeding the nominal rated current will void the warranty.
- Due to heavy weight of the components of size 2212, strong forces and high accelerations might have the effect to damage the electrical connection or to harm the circuit board and will void the warranty.

The general and product specific cautions comply with the state of the scientific and technical knowledge and are believed to be accurate and reliable; however, no responsibility is assumed for inaccuracies or incompleteness.



				Projection 		DESCRIPTION
2.5	2014-09-16	SSt	BD			WE-HCI SMD Flat Wire High Current Inductor
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2.2	2012-12-06	SSt	SSt			
2.1	2012-10-25	SSt	BD			
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REV	DATE	BY	CHECKED			
				Würth Elektronik eiSos GmbH & Co. KG EMC & Inductive Solutions Max-Eyth-Str. 1 74638 Waldenburg Germany Tel. +49 (0) 79 42 945 - 0 www.we-online.com eiSos@we-online.com		Order.- No. 7443551181 Size: 1365
						SIZE A4

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